

A CLUSTER-CUP FUNGUS ON LESPEDEZA IN  
NEW ENGLAND.

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THE Cluster-cup fungus, *Aecidium leucostictum*, growing on leaves of various species of *Lespedeza*, was first mentioned as occurring in North Carolina, being listed in Curtis's Catalogue of the plants of that state. It has since been found in southern Illinois (Seymour) on *Lespedeza repens*, in Canada (Dearness) on *L. capitata*, and in Alabama (Earle). It was first described in Grevillea 3:61. December 1874, by Berkeley as *Aecidium Orobi* var. *leucostictum* and again in Bull. Ill. Lab. 2:226. 1885. There it is well considered a distinct species as named above.

It has never been reported within five hundred miles of Boston till now. On the twentieth of July, 1900, I found it fairly abundant in several localities on *Lespedeza hirta* near Shoot-flying hill, about five miles west of Hyannis, Mass., on the western end of Cape Cod. The Canada specimens were also collected in July, but the southern Illinois specimens in May.

The plant is easily detected by the pale but clear yellow spots which occur on the upper surface of the leaf, opposite the cluster-cups, and are about 2 mm. in diameter.

The cups are small, very inconspicuous and in clusters of about twenty-five, scattered or arranged in minute "fairy rings."

The question now arises, what is the teleutosporic rust-form of this fungus. If it is a heteroecious species, like wheat-rust, which grows at one stage on barberry and at another on wheat, the teleutosporic stage must occur on some plant of wide distribution. If, however, the fungus is autoecious, producing teleutospores on the same host plant, are the teleutospores known as such, or do they remain to be discovered? Among known forms, the only one which suggests itself is *Uromyces Lespedezae*. This has both uredo and teleutospores known and is abundant on various species of *Lespedeza*. It is very common and widely distributed. If *Aecidium leucostictum* is correspondingly abundant, it must be generally overlooked.

Whatever its affinities, there is no apparent reason why it may not be found elsewhere in New England.

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